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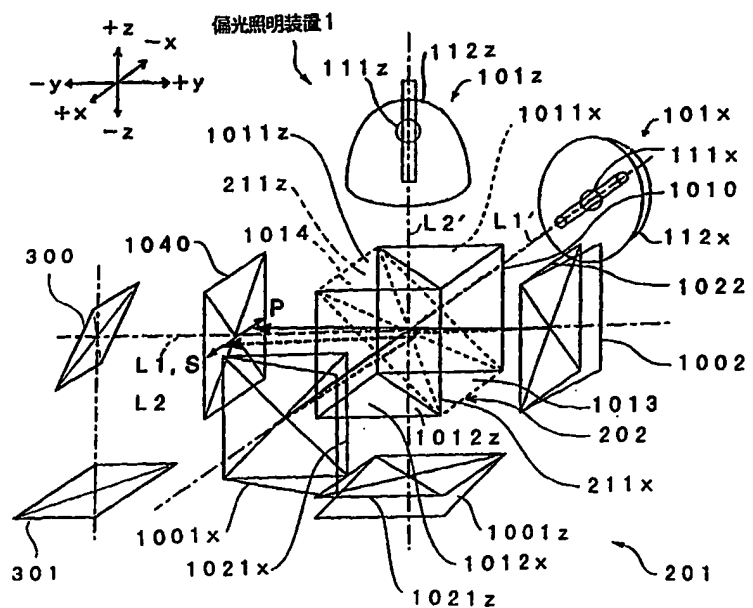
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(54) Title: **POLARIZED LIGHT SEPARATING/COMBINING OPTICAL ELEMENT, POLARIZED LIGHT ILLUMINATING APPARATUS AND PROJECTION-TYPE DISPLAY DEVICE**

(54) 発明の名称 偏光分離合成光学素子および、偏光照明装置並びに投射型表示装置

(57) Abstract

Random polarization lights which are emitted from 1st and 2nd light source units (101x and 101z) are separated into 2 types of polarization lights having different directions by a polarization separating unit (202) and then secondary light source images shifted in an x-direction are formed and the polarization lights are arranged in the same direction. At that time, in order to make both the secondary light source images by S-polarization lights and both the secondary light source images by P-polarization lights in lights emitted from the 1st and 2nd light source units (101x and 101z) respectively overlap each other, 1st, 2nd and 3rd light collecting mirror plates (1001x, 1002 and 1001z) are placed aslant. With this constitution, a polarized light illuminating apparatus which can utilize both the polarization components without increasing the areas of the light source images even if a plurality of light sources are used can be obtained and, further, a projection-type display which can project a very bright projection image can be obtained.



1 ... polarized light illuminating apparatus